

Abstract

A cylindrical encoder has a cylinder with a coding surface that is disposed about a rotational axis. The coding surface has code lines that spiral along the cylinder about the rotational axis. Resolution depends on the pitch, or spacing, of the code lines, and on the angle
5 at which the code lines are oriented to the rotational axis. An imaging system positioned for optical coupling to the coding surface senses a succession of moving code lines as the cylinder rotates about the rotational axis.